

Based on the following amendments and remarks, the application is deemed to be in condition for allowance and action to that end is respectfully requested.

IN THE CLAIMS

Please cancel claims 1-12 and add new claims 14-27 as follows:

1 --14. (New) An apparatus for measuring a medical substance contained in a sample using a resonance phenomenon resonating with an evanescent wave, said apparatus, comprising:

a resonance phenomenon generating section having a resonance material; and

a detecting means for detecting a change of an incident light which is made incident upon said resonance material to generate said resonance phenomenon or a change of a reflected light thereof; and

a<sup>1</sup> wherein the medical substance to be measured is fixed to said resonance material as an antigen.

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15. (New) An apparatus according to Claim <sup>1</sup>14, wherein said change to be detected by said detecting means is an incident angle of said light being made incident upon said resonance material when an intensity of the reflected light thereof is decreased.

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16. (New) An apparatus according to Claim <sup>1</sup>14, wherein said change to be detected by said detecting means is a wavelength or a wave number of said reflected light when an intensity of said reflected light is decreased.

<sup>5</sup>  
17. (New) An apparatus according to Claim <sup>1</sup>~~14~~, wherein said change to be detected by said detecting means is an intensity of said reflected light when the incident light is made incident upon said resonance material with a predetermined incident angle.

<sup>7</sup>  
18. (New) An apparatus according to Claim <sup>1</sup>~~14~~, wherein said change to be detected by said detecting means is an incident angle of said incident light when a phase of said reflected light is varied.

<sup>8</sup>  
~~19~~ (New) An apparatus according to Claim <sup>1</sup>~~2~~, wherein said resonance phenomenon is a surface plasmon resonance phenomenon.

<sup>1</sup>  
<sup>9</sup>  
<sup>2</sup>  
<sup>10</sup>  
20. (New) An apparatus according to Claim <sup>8</sup>~~19~~, wherein said resonance phenomenon generating section comprises a prism having a high refractive index, a thin metal film directly or indirectly formed on one of said prism as said resonance material, and a light source for making a light incident upon said metal film via said prism, wherein the medical substance to be measured is fixed as an antigen to another surface of said metal film which is opposite to the surface on which said prism is formed.

<sup>10</sup>  
21. (New) An apparatus according to Claim <sup>9</sup>~~20~~ further comprising a calculating means for recognizing an amount of said medical substance contained in said sample in accordance with the change detected by said detecting means.

11  
22. (New) A medical substance sensor for use in an apparatus for measuring a medical substance contained in a sample using a resonance phenomenon resonating with an evanescent wave comprising a resonance material where a resonance phenomenon is caused to resonate with an evanescent wave, wherein the medical substance to be measured is fixed to said resonance material as an antigen.

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23. (New) A medical substance sensor according to Claim 22 further comprising a prism having a high refractive index, a thin metal film which is directly or indirectly formed on one of the surfaces of said prism as said resonance material, wherein the medical substance to be measured is fixed as an antigen to another surface of said metal film which is opposite to the surface on which said prism is formed.

a' conf.  
24. (New) A method for measuring a medical substance contained in a sample using a resonance phenomenon resonating with an evanescent wave, said method comprising the steps of:

fixing a medical substance to be measured to a resonance material wherein a resonance phenomenon is caused to resonate with an evanescent wave as an antigen;

mixing an antibody which is coupled with said fixed medical substance in a specific manner to said sample;

bringing the mixture in contact with the resonance material to which said medical substance has been fixed;

making a light incident upon said resonance material;